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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,117

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Daisuke Awakura

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EXAMINER

SZNAIDMAN, MARCOS L

ART UNIT

PAPER NUMBER

1612

MAIL DATE

DELIVERY MODE

04/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,117	Applicant(s) AWAKURA ET AL.	
	Examiner MARCOS SZNAIDMAN	Art Unit 1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 11-34 is/are pending in the application.
- 4a) Of the above claim(s) 14, 19 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-13, 15-18, 20-25, 27-29 and 31-34 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>29 pages / 06/01/05, 01/16/09, 02/15/09, 02/19/09,</u> | 6) <input type="checkbox"/> Other: _____ |
| <u>02/24/09 and 02/24/09 and 02/24/09.</u> | |

DETAILED ACTION

This office action is in response to applicant's reply filed on January 16, 2009.

Election/Restrictions

Applicant's election of Group V (claims 11-34) and potassium phosphite as the elected species for Compound A in the reply filed on January 16, 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Status of Claims

Cancellation of claims 1-10 and addition of claims 11-34 is acknowledged.

Claims 11-34 are currently pending and are the subject of this office action.

Claims 14, 19 and 26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 16, 2009.

Claims 11-13, 15-18, 20-25 and 27-34 are presently under examination.

Priority

The present application is a 371 of PCT/JP03/15543 filed on 12/04/2003, and claims priority to foreign application: JAPAN 2002-352697 filed on 12/04/2002.

Claim Objections

Claim 30 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claims.

See MPEP § 608.01(n).

Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11-13, 15-18, 20-25, 27-29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staub et. al. (US 4,849,219) in view of Pirgozliev et. al. (European Journal of Plant Pathology (2002) 108:469-478).

Claims 11-13, 15, 29, and 31-34 recite a method for inhibiting or reducing mycotoxin contamination (wherein the mycotoxin is deoxynivalenol, see claim 32) by fungi on a cereal (wherein the cereal is wheat, see claims 29 and 34) an effective amount of a composition comprising potassium phosphite (species elected).

For claims 11-13, 15, 29 and 31-34, Staub teaches a fungicidal composition comprising potassium phosphite (e.g. monopotassium phosphite and dipotassium phosphite, see column 4, lines 1 and 3) useful for the treatment of Fusarium fungi (see column 5, line 6) in crops like wheat (see column 5, line 24).

The specific combination of features claimed is disclosed within the broad generic ranges taught by the reference but such “picking and choosing” within several variables does not necessarily give rise to anticipation. Corning Glass Works v. Sumitomo Elec., 868 F.2d 1251, 1262 (Fed. Circ. 1989). Where, as here, the reference does not provide any motivation to select this specific combination of variables (potassium phosphate as the antifungal, Fusarium as the fungi, and wheat as the cereal), anticipation cannot be found.

That being said, however, it must be remembered that “[w]hen a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious”. KSR v. Teleflex, 127 S.Ct. 1727, 1740 (2007)(quoting Sakraida v. A.G. Pro, 425 U.S. 273, 282 (1976)). “[W]hen the question is whether a patent claiming the combination of elements of prior art is obvious”, the relevant question is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” (Id.). Addressing the issue of obviousness, the Supreme Court noted that the analysis under 35 USC 103 “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” KSR v. Teleflex, 127 S.Ct. 1727, 1741 (2007). The Court emphasized that “[a] person of ordinary skill is... a person of ordinary creativity, not an automaton.” Id. at 1742.

Art Unit: 1612

Consistent with this reasoning, it would have obvious to have selected various combinations of various disclosed ingredients (potassium phosphate as the antifungal, Fusarium as the fungi and wheat as the cereal) from within a prior art disclosure, to arrive compositions “yielding no more than one would expect from such an arrangement”.

Staub does not teach reducing mycotoxin, wherein mycotoxin is deoxynivalenol. However, Pirgozliev teaches that Fusarium releases the mycotoxin deoxynivalenol (DON) (see abstract and Introduction).

Since Staub teaches that potassium phosphite can treat fusarium in wheat, and since according to Pirgozliev fusarium releases the mycotoxin deoxynivalenol, at the time of the invention, it would have been *prima facie* obvious for a person of ordinary skill in the art to reduce or inhibit deoxynivanelol contamination in wheat comprising the administration of potassium phosphite, thus resulting in the practice of claims 11-13, 15, 29, and 31-34 with a reasonable expectation of success.

Claims 16-18, 20-25 and 27-28 further limit claim 11, wherein the composition further comprises an effective amount of at least one fungicidal active ingredient for agri-horticulture (azoxystrobin in claims 21-25 and 27-28).

For claims 16-18, 20-25 and 27-28 Pirgozliev further teaches a method for reducing the amount of the mycotoxin deoxynivalenol (DON) that is released by Fusarium, comprising the administration of azoxystrobin (see abstract).

Art Unit: 1612

At the time of the invention it would have been *prima facie* obvious for a person of ordinary skill in the art to inhibit or decrease the amount of deoxynivalenol contamination in wheat, combining two compositions (potassium phosphite and azoxystrobin) each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in the prior art (see MPEP 2144.06). *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). All this would result in the practice of claims 16-18, 20-25 and 27-28 with a reasonable expectation of success.

Conclusion

No claims are allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCOS SZNAIDMAN whose telephone number is (571)270-3498. The examiner can normally be reached on Monday through Thursday 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick F. Krass can be reached on 571-272-0580. The fax phone

Art Unit: 1612

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARCOS SZNAIDMAN/
Examiner, Art Unit 1612
March 30, 2009.

/Brandon J Fetterolf/

Primary Examiner, Art Unit 1642